A New Species of Anthurium (Araceae) from Chiapas, Mexico

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ABSTRACT. Anthurium faustomirandae sp. nov. is described and illustrated from Chiapas, Mexico. It is similar to A. titanium Standley & Steyermark but differs from that species in having persistent intact cataphylls, thicker pruinose leaf blades with an acute rather than acuminate apex, and a shorter, stouter inflorescence with a much broader spathe and more stipitate spadix.

RESUMEN. Anthurium faustomirandae sp. nov. de Chiapas es descrita e ilustrada. Presenta afinidad con A. titanium Standley & Steyermark de Chiapas, pero difiere de esta especie en la catafila intacta persistente, lamina pruinosa con apice acuminado, inflorescencia con una espata mucha mas ancha y espadice más estipitado.

Rupicolous plant; stems short, light brown, generally 18–23 cm long; sap pale yellow to light green; internodes short, 7.6-8.7 cm diam., leaf scars 4–7 cm wide. Roots \pm thick, 5.5–6.8 mm diam., pale gray-brown, descending; cataphylls persistent, 14-27 cm long, moderately coriaceous fresh, papyraceous on drying, pale olive-green fresh, drying medium to light yellow-brown, acute at apex, persistent intact at apex but sometimes splitting as red-brown fibers at base. Leaves \pm pendent from erect-spreading petioles; petioles subterete, obtusely flattened adaxially, sometimes weakly D-shaped, medium green, semiglossy, sometimes yellowish to light cream short-lineate throughout, 82-109 cm long, 11.4-12.8 mm diam., 1.6 cm diam. midway; geniculum 4.5-6.6 cm long, to 2 cm diam. at apex, \pm D-shaped; blades deeply cordate, ovate to broadly ovate or nearly rounded, 73-89 (-130) cm long, 48-62(-135) cm wide, ca. 1.4-1.5 times longer than wide, broadest at middle or just below, moderately coriaceous, epunctate, semiglossy, dark green above, moderately paler and pruinose below, gradually acuminate at apex (sometimes apiculate with acumen 1-2 mm long); margins markedly undulate; anterior lobe 51-65.5 cm long with margins broadly rounded; posterior lobes 18-32 cm long; sinus spathulate, acute to rounded at apex; midrib convex and slightly paler above, convex and slightly paler, sometimes more acute below; basal veins 6-9 pairs, the first and

Key words: Anthurium, Araceae, Mexico.

During a trip to San Fernando, Chiapas, Mexico, for a monitoring project of cycad populations, we collected an *Anthurium* with a large leaf very similar in size to that of *A. titanium*. The new collection was distinct from that species, especially by its short inflorescences, intact cataphylls, and pruinose blades. The new species has been confused with *A. titanium*, a species endemic to a small area of southeastern Chiapas in Mexico and adjacent western Guatemala in the Department of San Marcos at elevations of 900 to 1800 m.

Anthurium faustomirandae Pérez-Farrera &

Croat, sp. nov. TYPE: Mexico. Chiapas: Montañas del Norte, 2 km N of Colonia Cuactemoc, Mpio. de San Fernando, 850 m, 16 Apr. 1995, *Pérez-Farrera 263* (holotype, CHIP; isotype, MO).

Planta rupestris; caudex ad 18–23 cm longus, 7.6–8.7 cm diam.; petiolus 82–109 cm longus; lamina ovata, coriacea, basi cordata, 73–89 cm longa, 48–62 cm lata. Inflorescentia petiolis breviora; pedunculus 9.2–24 cm longus, 5.3–13.2 mm diam., erectus; spatha coriacea, oblongo-lanceolata, 14–29 cm longa, 4.6–10.6 cm lata, spadice viridi, 12–17 cm longa, 1.4–2 cm diam. Baccae virides.

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often second free to base, the 3rd-4th and higher veins coalesced 4.5-7.5 cm, raised above and below; posterior ribs conspicuously upturned along margin, naked for 2.5-6 cm; primary lateral veins 3-4 per side, departing midrib at 40°-45° angle, \pm straight to collective vein; interprimary veins usually not apparent except near apex; lesser veins distinct, weakly raised below; collective veins arising from the first basal vein on smaller blades or from one of the primary lateral veins on the larger blades, weakly sunken above, raised below, 8-10 mm from margin, loop-connecting to primary lateral

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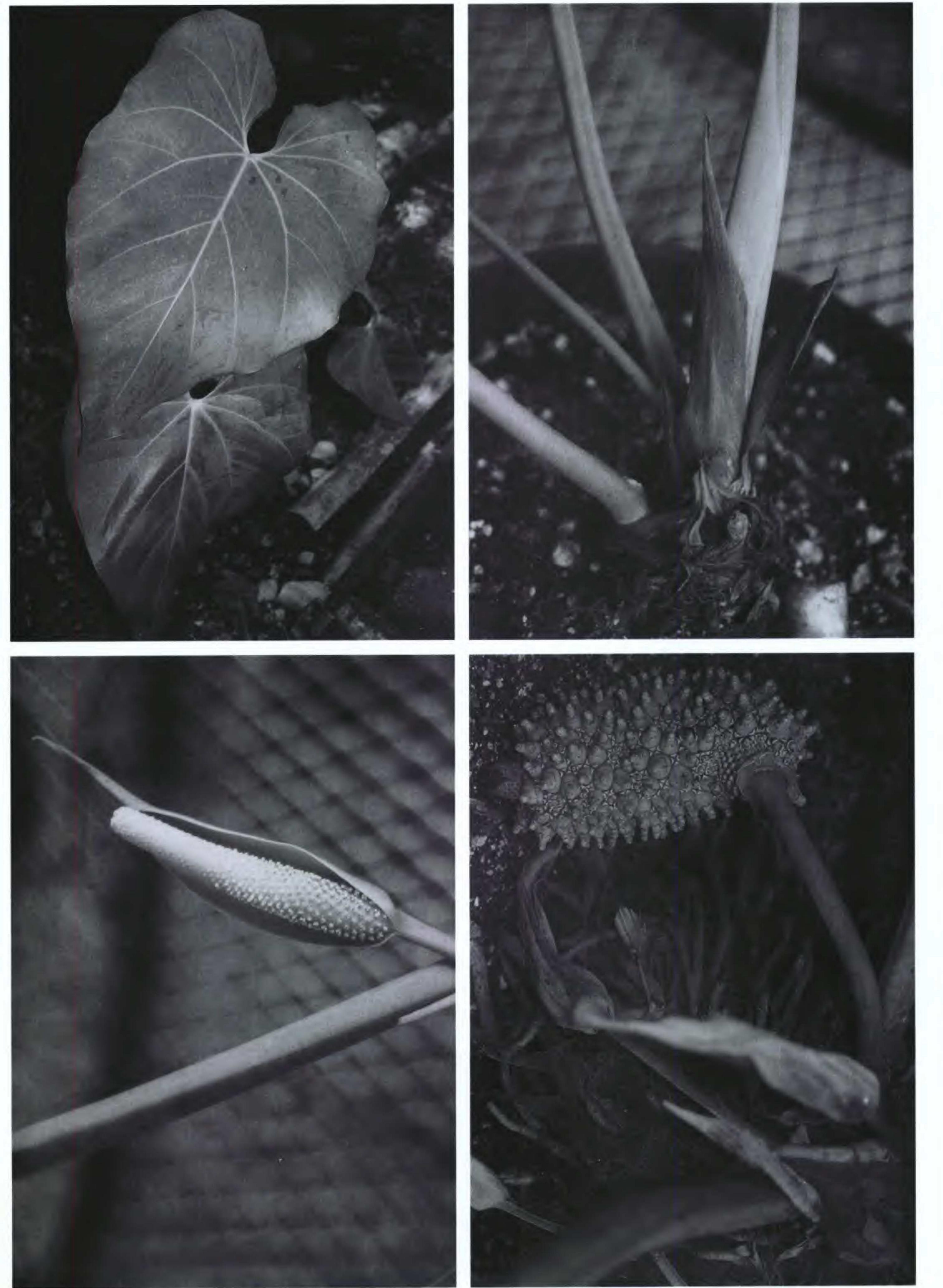




Figure 1. Anthurium faustomirandae Pérez-Farrera & Croat. —Top left. Leaf blades in face view (Pérez-Farrera 263). —Top right. Stem showing cataphylls (Selby 1996–0174). —Bottom left. Inflorescence showing erect spathe (Selby 1996-0174). -Bottom right. Infructescence showing immature berries (Pérez-Farrera 263).

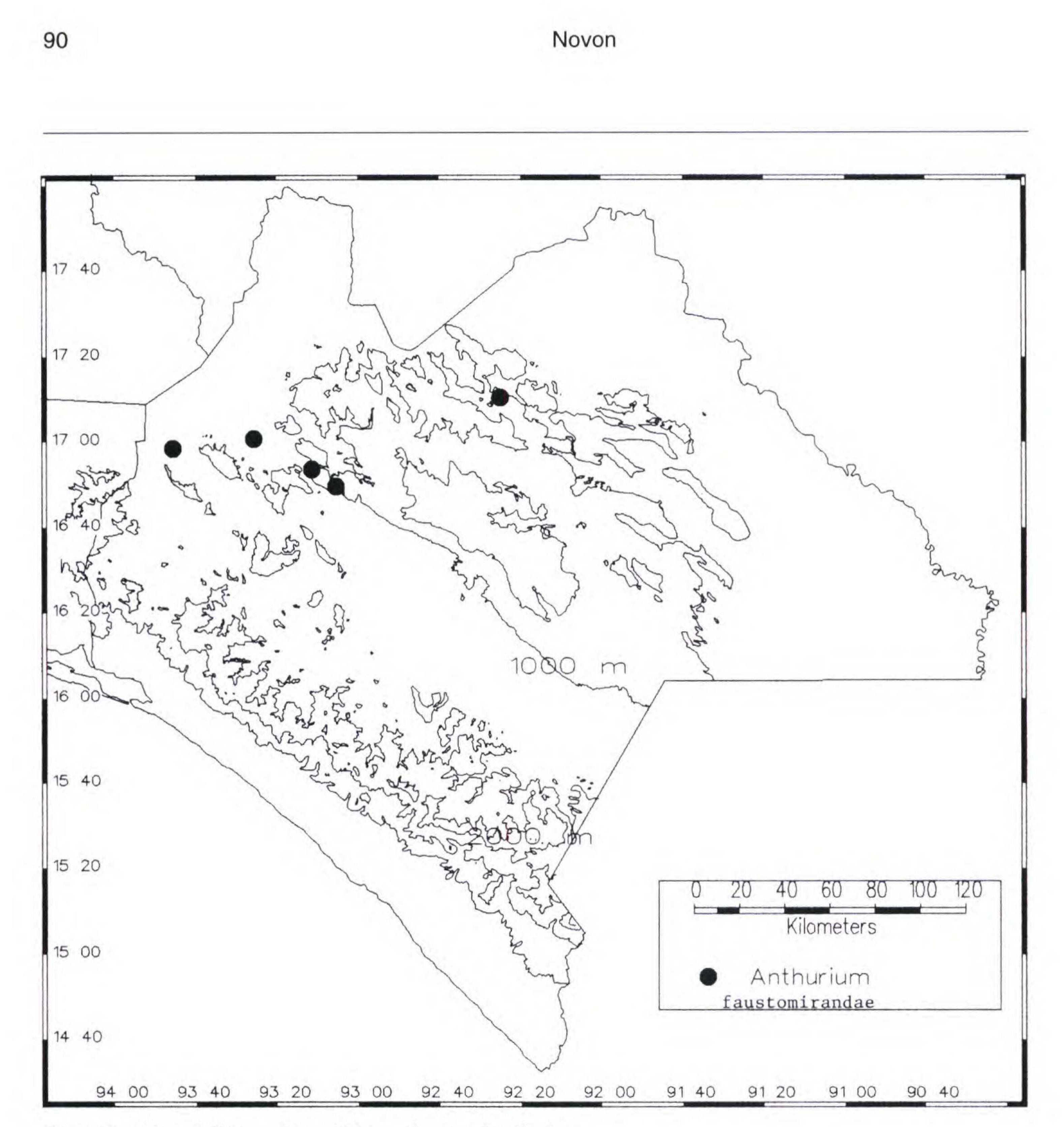


Figure 2. Map of Chiapas State, México, showing distribution.

veins. Inflorescence erect-spreading, much shorter than petioles; peduncle 9.2-24 cm long, 5.3-13.2 mm diam., terete; spathe hooding spadix, coriaceous, light green within, medium green outside, broadly lanceolate, 14.2-29 cm long, 4.6-10.6 cm wide, broadest just above base, long-acuminate, cirrhose and inrolled at apex, inserted at 40° angle on peduncle; shortly stipitate for 3-6 mm long in front, 1-2 mm long in back; spadix spindle-shaped, olive- to light green, 12-17 cm long, 1.4-2 cm diam. at base, 0.7-1.3 cm diam. at apex; flowers 4lobed, 2-3 mm long, 2-3.5 mm wide, margins sinuate to weakly sigmoid. Infructescence arching-pendent; spathe usually persisting; spadix green, to 20 cm long, to 3 cm diam.; berries olive-green, obovoid to ellipsoid, rostrate at apex, mesocarp pulpy, light yellow-cream; seeds 2 per berry, dark cream

to light yellow, ovate-ellipsoid, 2 cm long, 0.7 cm wide (Fig. 1).

DIAGNOSTIC KEY

- 1a. Blade not pruinose, subcoriaceous; the surface quilted (raised between the primary lateral veins); cataphylls weathering to coarse fibers; inflorescence usually moderately slender with the peduncle usually longer than spadix; spathe 1.8–3.2 cm wide; spadix stipitate 4.5–7 mm long in back A. titanium
- 1b. Blade often pruinose, moderately coriaceous; the surface scarcely or not at all quilted; cataphylls persisting ± intact; inflorescences usually moderately stout with peduncle usually shorter than spadix; spathe 4.6–10.6 cm wide; spadix stipitate 1–2 mm long in back A. faustomirandae

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HABITAT

Anthurium faustomirandae is apparently endemic to the state of Chiapas in Mexico, occurring at 850–1000 m elevation. It is known for certain only from a small area of northeastern Chiapas in an area of "Bosque Tropical Perennifolio" in the mountains between Yajalon and Tila, where it occurs on karst rocks (Fig. 2), and near San Fernando (Ocozocoautla, Cintalapa), near the northern limits of the Central Depression of Chiapas in areas of "Bosque Tropical Subcaducifolio" (Rzedowski, 1978). In the latter area it occurs with an overstory of Belotia mexicana (DC.) Schumann, Ficus sp., Manilkara chicle (Pittier) Pennington, M. zapota (L.) P. Royen, Sideroxylon sp., Bursera simaruba (L.) Sargent, Ficus hemsleyana Standley, Playmiscium dimorphandrum D. Smith, a shrubby layer dominated by Astrocaryum mexicanum Liebmann, Chamaedorea ernesti-angusti H. Wendland, C. glaucifolia H. Wendland, C. arenbergiana H. Wendland, Heliconia sp., and a herbaceous layer comprised of Anthurium huixtlense Matuda, A. clarinervium Matuda, A. pentaphyllum (Aublet) G. Don var. bombacifolium (Schott) Madison, and a Calathea sp.

nium (Croat, 1983). Miranda's original live collection of this species is still in cultivation in the Jardín Botánico "Faustino Miranda" at the Instituto de Historia Natural in Chiapas. The new species is by far the largest Anthurium in Mexico, attaining a size even larger than that of A. titanium. Anthurium faustomirandae is easily the largest species in Mexico and Middle America.

The species is named in honor of the late Spanish botanist Faustino Miranda (1905–1964) who lived and worked in Mexico. He was the first to collect the species and to bring it into cultivation. It is a very desirable cultivar and has been in cultivation for many years by a number of people in the Miami, Florida, area.

Paratypes. MEXICO. Chiapas: 8 km W of Petalcingo, Tila, Pérez-Farrera 1655A (CHIP); 21 km N of Tuxtla Gutierrez, Mirador La Atalaya, Cañon del Sumidero, Pérez-Farrera 1706G (CHIP); El Encajonado, Selva El Ocote, Cintalapa, Pérez-Farrera 1867A (CHIP); 15 km N of Ocozocoautla-Cosoleacaque, Ocozocoautla, Pérez-Farrera 1886 (CHIP); Montañas del Norte, 2 km N of Colonia Cuactemoc, Municipio de San Fernando, Miranda 6160 (MEXU), 6162 (CHIP).

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DISCUSSION

The species is tentatively placed in Anthurium sect. Calomystrium owing to its persistent intact cataphylls, subterete petioles, and thick spathe and spadix. Mexican species have proven to be unique, isolated, and distinct from other species in the same sections in other parts of Central America. Breeding studies should be carried out between A. faustomirandae and A. huixtlense Matuda, a species of unquestioned placement in section Calomystrium, to confirm its placement here. The species was first collected by botanist Faustino Miranda at San Fernando, Chiapas, based on Miranda 6160 and 6162 (Miranda, 1952). Miranda determined it as A. xanthosomifolium Matuda (perhaps due to its large leaves), which is now a synonym of A. tita-

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